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[Continued on next page]

(54) Title: CLONING AND CHARACTERIZATION OF SLC26A6, SLC26A1, AND SLC26A2 ANION EXCHANGERS

SEQ ID NO.

70	SLC26A1	(71)	CDVMSGLVIGIILVPOAIAYSLLAG--LQPIYSLYTSFFANLIYFLMGTS
71	SLC26A2	(110)	CDVMSGLVIGIILVPOAIAYSLLAG--QEPIYGLYTSFFASTIYFLFGTS
72	SLC26A3	(75)	SDIVSGISTGLVAVLQGLAFALLVN--LPPAYGLYAAFFPVITTYFFLGTS
73	SLC26A4	(86)	SDIISGVSTGLVGTLOGMAYALLAA--VPVQGLYSFAFFPILTYFVFGTS
74	SLC26A5	(82)	CDIVSGISTGLVQIPOGLAFAMLLA--VPPVQGLYSFYPVIMYCFFGTS
75	SLC26A6	(94)	GDLLSGLSVAIMQIPQGLAYALLAG--LPPMFGLYSSFPVFIYFLFGTS
76	SLC26A7	(49)	PDTVSGIMLAYQVQVAGGLSFAMLS--VHPVQGLYGSLEPAIYAFIEMG
77	SLC26A8	(92)	GDLLAGLSVGLAQVQVQGLILSLTRQLIPPINVTYAFCSVIVYVIFGSC
78	SLC26A9	(73)	PDLLGGLSGGCIQVPOGMFAFALLAN--LPAVNGLYSSFPFLLTYFFLGGI
79	SLC26A11	(33)	LDFTAGLSVGLTVIPOALAYAEVAG--LPPQYGLYSAEMGCENYFFLGTS
70	SLC26A1	(119)	RHVNVGIFSLCLMVGQVVDRELQLAGFDPSQDSLGPKNNDSTLNNSATT
71	SLC26A2	(158)	RHISVGIFGILCLMIGEVDRELHKACPDTDATSSSIATVSSGCVVNHNT
72	SLC26A3	(123)	RHISVGPFVLSLMVGVVTRVVSDFPNASS-----ELSSSTENDSEFI
73	SLC26A4	(134)	RHISVGPFVLSLMVGSVVLSPAPDDHFLVPSGNGS-ALNSTTLDTGTRD
74	SLC26A5	(130)	RHISIGPFAVLSLMIGGAVRLVDDIVIPG-G-----VNATNGTEARD
75	SLC26A6	(142)	RHISVGTFVMSVMVGSVTESLTADKAFVQG-----LNATAD
76	SLC26A7	(97)	RHVATGTFALTSLISANAVRELVPQSSRNLTQ--S---NSSVGLSEFE
77	SLC26A8	(142)	QMSIGPFVLSALMINVLKDRPFNNHGLILG---TFVKDDFSVPTFYLS
78	SLC26A9	(121)	QMVPGTFVLSILVGNICLOLAPESKFOIFNN---VTNETYVDTAAME
79	SLC26A11	(81)	RDVTLGPATMSLLVSFYTFREPAYAVLLA-----

(57) Abstract: Isolated nucleic acids encoding SLC26A6, SLC26A1, and SLC26A2 anion transporter polypeptides, recombinantly expressed SLC26A6, SLC26A1, and SLC26A2 anion transporter polypeptides, heterologous expression systems for recombinant expression of SLC26A6, SLC26A1, and SLC26A2 anion transporter polypeptides, assay methods employing the same, and methods for modulation of anion transport activity.

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